EduSahara™ Assignment

Name : Rational Numbers and their Decimal Expansions

Chapter : Number Systems

Grade : CBSE Grade IX

1. The recurring part of the decimal $24.2\overline{7}$ is

   (i) 24.27 (ii) 727 (iii) 77 (iv) 7 (v) 772

2. The recurring part of the decimal 10.44444444444444... is

   (i) 441 (ii) 444 (iii) 4 (iv) 44 (v) 10.4

3. Convert the non-terminating recurring decimal $30.\overline{8}$ to rational number

   (i) $\frac{278}{11}$ (ii) $\frac{280}{9}$ (iii) $\frac{278}{9}$ (iv) $\frac{92}{3}$ (v) $\frac{278}{7}$

4. Convert the non-terminating recurring decimal 21.88888888888888... to rational number

   (i) $\frac{65}{3}$ (ii) $\frac{197}{9}$ (iii) $\frac{197}{7}$ (iv) $\frac{199}{9}$ (v) $\frac{197}{11}$

5. Convert the fraction $\frac{83}{27}$ to non-terminating recurring decimal

   (i) $0.03\overline{074}$ (ii) $0.3\overline{074}$ (iii) $307.\overline{407}$ (iv) $3.\overline{074}$ (v) $30.\overline{740}$

6. Convert the fraction $\frac{19}{9}$ to non-terminating recurring decimal

   (i) $2.\overline{1}$ (ii) $0.2\overline{1}$ (iii) $0.02\overline{1}$ (iv) $21.\overline{1}$ (v) $211.\overline{1}$

7. Which of the following fractions converts to a non-terminating recurring decimal?

   (i) $\frac{1}{3}$ (ii) $\frac{2856}{128}$ (iii) $\frac{2926}{160}$ (iv) $\frac{373}{16}$ (v) $\frac{357}{8}$

8. Which of the following fractions converts to a terminating decimal?

   (i) $\frac{1}{3}$ (ii) $\frac{158}{9}$ (iii) $\frac{79}{63}$ (iv) $\frac{79}{36}$ (v) $\frac{3564}{32}$

9. Which of the following is an irrational number?

   (i) 7 (ii) 3 (iii) $\sqrt[3]{97}$ (iv) 0.3333 (v) $\frac{11}{25}$

10. Which of the following is a rational number?

    (i) $\sqrt[3]{82}$ (ii) $\sqrt{22}$ (iii) $\sqrt[3]{72}$ (iv) $\sqrt{27}$ (v) $\frac{1}{2}$

11. Express $\frac{9}{10}$ as a decimal correct to 1 decimal places

(i) 0.9 (ii) 0.7 (iii) 0.1 (iv) 1 (v) 9

12. Express $\frac{89}{100}$ as a decimal correct to 2 decimal places

(i) 8.9 (ii) 0.69 (iii) 0.99 (iv) 0.89 (v) 0.09

13. Express $\frac{311}{1000}$ as a decimal correct to 3 decimal places

(i) 0.411 (ii) 0.031 (iii) 0.311 (iv) 3.11 (v) 0.111

14. Express $\frac{3311}{10000}$ as a decimal correct to 4 decimal places

(i) 0.3311 (ii) 0.0331 (iii) 0.1311 (iv) 3.311 (v) 0.4311

15. 1.1 =

(i) 11 (ii) 110 (iii) $\frac{11}{10}$ (iv) $\frac{11}{100}$ (v) $\frac{11}{1000}$

16. 4.3 =

(i) $\frac{43}{100}$ (ii) $\frac{43}{1000}$ (iii) $\frac{43}{10}$ (iv) 43 (v) 430

17. 20.79 =

(i) $\frac{2079}{10}$ (ii) $\frac{2079}{10000}$ (iii) $\frac{2079}{1000}$ (iv) 2079 (v) $\frac{2079}{100}$

18. 10.821 =

(i) $\frac{10821}{100}$ (ii) $\frac{10821}{100000}$ (iii) $\frac{10821}{1000}$ (iv) $\frac{10821}{10}$ (v) $\frac{10821}{10000}$

19. 10.6 =

(i) 106 (ii) $\frac{53}{50}$ (iii) $\frac{53}{5}$ (iv) $\frac{53}{500}$ (v) 1060

20. 3.20 =

(i) $\frac{16}{5}$ (ii) 320 (iii) $\frac{8}{25}$ (iv) 32 (v) $\frac{4}{125}$

21. 3.60 =

(i) $\frac{9}{250}$ (ii) 360 (iii) 36 (iv) $\frac{18}{5}$ (v) $\frac{9}{25}$

22. 2.310 =

(i) $\frac{231}{10}$ (ii) $\frac{231}{100}$ (iii) $\frac{231}{1000}$ (iv) 231 (v) $\frac{231}{10000}$

23. Which of the following symbols represent the set of Natural numbers ?

(i) N (ii) Q' (iii) Q (iv) R (v) W

24. Which of the following symbols represent the set of Whole numbers ?

(i) W (ii) Q' (iii) Q (iv) Z (v) R

25. Which of the following symbols represent the set of Integers ?

(i) R (ii) Q' (iii) W (iv) Z (v) Q

26. Which of the following symbols represent the set of Rational numbers ?

(i) N (ii) Z (iii) Q (iv) W (v) Q'

27. Which of the following symbols represent the set of Irrational numbers ?

(i) Q' (ii) W (iii) Q (iv) R (v) N

28. Which of the following symbols represent the set of Real numbers ?

(i) N (ii) W (iii) Q (iv) Q' (v) R

Assignment Key

1) (iv)	2) (iii)	3) (iii)	4) (ii)	5) (iv)	6) (i)
7) (i)	8) (v)	9) (iii)	10) (v)	11) (i)	12) (iv)
13) (iii)	14) (i)	15) (iii)	16) (iii)	17) (v)	18) (iii)
19) (iii)	20) (i)	21) (iv)	22) (ii)	23) (i)	24) (i)
25) (iv)	26) (iii)	27) (i)	28) (v)		